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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,516	11/14/2003	Michael Garfield	200189.00001	9976

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EXAMINER

LEE, RIP A

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 03/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/713,516

Applicant(s)

GARFIELD ET AL.

Examiner

Rip A. Lee

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26 is/are allowed.
- 6) ☒ Claim(s) 1-5,7,9-11,14-19,22,23,25,27 and 28 is/are rejected.
- 7) ☒ Claim(s) 6, 8, 12, 13, 20, 21 and 24 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 04-21-2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 14-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim recites the relative term, "narrow," to describe the molecular weight distribution of the aliphatic resin. The specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of what constitutes "narrow molecular weight distribution" in reference to aliphatic hydrocarbon resins (as opposed to the concept of narrow molecular weight distribution for polymers, which is generally understood). Since claims 15 and 16 depend from claim 14, they are subsumed under the current rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1-3, 5, 17-19, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by GB 2,223,023 to Miller.

The prior art of Miller discloses a composition of matter comprised of SIS block copolymer, hydrocarbon resin, and aromatic and/or chlorinated hydrocarbon solvent (abstract). The embodiment shown in Example I is representative; it contains 71 wt % of solvent system, 15 wt % of block copolymer, and 14 % of hydrocarbon resin. Note that the hydrocarbon resin is derived from petroleum. Trichloroethylene is used as the halogenated solvent. As such, the subject matter of claims 1-3, 5, and 17-19 is anticipated by Miller. Claim 25 is also anticipated by the prior art. Upon evaporation, the copolymer and hydrocarbon mixture is sufficiently hydrophobic so as to impart waterproofing characteristics.

7. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller.

The patent is silent with respect to the rheological properties of the inventive materials. However, in light of the fact that the claimed composition of Miller is essentially the same as that claimed in the present application (note that the compositional requirements and relative amounts of components are met by the prior art), and in view of the fact that the material is fluid and may be applied by spraying (page 2, line 27), as is the case with the present composition, one of ordinary skill in the art would have found it obvious to believe reasonably that the composition of the prior art exhibits essentially the same physical properties recited in the claims.[†] Since the PTO can not conduct experiments, the burden of proof is shifted to the Applicants to establish an unobviousness difference. *In re Fitzgerald*, 619 F.2d. 67, 205 USPQ 594 (CCPA 1980). See MPEP § 2112-2112.02.

[†] Products of identical chemical composition can not have mutually exclusive properties. A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. *In re Spada*, 911 F.2d 705, 709, 15 USPQ 1655, 1658 (Fed. Cir. 1990).

8. Claims 1-5, 7, 17-19, 22, 23, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,025,032 to Gaveske.

Gaveske teaches a method and composition for waterproofing a substrate using a formulation comprised of organic solvent, hydrocarbon resin, and block copolymer (claims 1 and 15). The solvent includes halogenated solvents such as methylene chloride, ethylene chloride, trichloroethylene, and chlorobenzene (col. 7, lines 30-32, examples in Table 1). The block copolymer includes SEBS, SBS, and SIS block copolymers (claims 3, 4, 7, 15, see also discussion in col. 5, line 19 – col. 6, line 35). The hydrocarbon resin is derived from petroleum streams (col. 4, line 30), and the text discloses further that the hydrocarbon resin is derived from cationic polymerization of monomer(s) (col. 4, lines 38-67) and may be hydrogenated to remove residual unsaturation (col. 5, line 5). Use of polyterpene resins is also contemplated (col. 5, line 11). The relative amounts of the three components are about 50-150 phr of organic solvent, about 25-35 phr of hydrocarbon resin, and about 10-15 phr of SEBS and SBS block copolymers (claims 15-19). This satisfies the relative amounts of each component as recited in the present claims. Use of pigments in the amount of about 0-10 phr is disclosed in col. 9, lines 33-40. In summary, the subject matter of the above claims is described fully in the prior art of Geveske.

9. Claims 9-11, 27, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaveske.

The patent is silent with respect to the rheological properties of the inventive materials. However, in light of the fact that (i) the composition of Gaveske is essentially the same as that claimed in the present application (note that the claimed compositional requirements and relative amounts of components are met by the prior art), (ii) the material is fluid and may be applied by spraying (claim 9, col. 11, lines 45-62), as is the case with the present composition, and (iii) viscosity of some embodiments lies in the range of 5563-14300 mPa-s (equiv to cP-s; temperature not specified) (see Tables 3a-3c), one of ordinary skill in the art would have found it obvious to believe reasonably that the composition of the prior art exhibits essentially the same physical properties recited in the claims.[†] Since the PTO can not conduct experiments, the burden of proof is shifted to the Applicants to establish an unobviousness difference. *In re Fitzgerald*, 619 F.2d. 67, 205 USPQ 594 (CCPA 1980). See MPEP § 2112-2112.02.

Regarding claims 27 and 28, Gaveske indicates that the substrate to which the composition is applied is a structural unit such as a foundation, basement and retaining walls, and other building walls (col. 3, lines 34-36). The waterproofing composition is applied by spraying, and this requires a flowable composition of appropriate viscosity (claim 9, col. 11, lines 45-62). Upon application to a substrate (*i.e.*, a wall), the composition is allowed to dry for about 4-24 hours so that the solvent is removed (col. 12, lines 11-16). Although the term “evaporation” is not used in the patent, clearly, evaporation is the operative mechanism. Thus, the process steps of mixing hydrocarbon resin and rubber component in a chlorinated organic solvent system, spraying, and evaporation is disclosed adequately in Gaveske. One of ordinary

skill in the art would have found it obvious to arrive at the manipulative features of claims 27 and 28 based on the prior art. Again, the only deficiency of Gaveske is that the patent does not disclose the rheological properties at the specified temperatures recited in the present claims. However, a reasonable basis exists to believe that the compositions of Gaveske exhibit the claimed physical properties. As such, it is maintained that it would have been obvious to one having ordinary skill in the art to arrive at the subject matter of the present claims by following the teachings of Gaveske by spraying the compositions described therein onto a wall in order to waterproof it.

Allowable Subject Matter

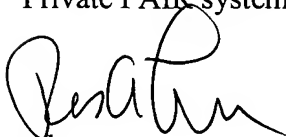
10. Claims 6, 8, 12, 13, 20, 21, and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The above claims describe meaningful developments of the instant invention which are neither disclosed nor made obvious in the cited art. Specifically, the salient feature of the present invention is use of a solvent which has no flash point, such as tetrachloroethylene, for making a waterproofing composition. As a result, the composition is non-flammable. Use of an aliphatic, or aromatic modified C5 hydrocarbon resin is another unobvious feature of the invention, as is the use of aluminum paste.

11. Claim 26 is allowed. The claim is drawn to a composition comprised of a hydrocarbon resin, a block copolymer selected from SIS, SBS, and SEBS block copolymer(s), and a solvent system comprising about 80 % to about 99 % ethylene tetrachloride (tetrachloroethylene) wherein the composition is non-flammable. Such a composition is not disclosed in the cited prior art.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (571)272-1104. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached at (571)272-1114. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <<http://pair-direct.uspto.gov>>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).



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March 14, 2005